

CLAIM AMENDMENTS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-6 (canceled)

Claim 7 (currently amended): A device for protecting an electronic module disposed in a control device in a multi-voltage on-board electrical system having an accumulator with a low on-board electrical system voltage against short circuiting to a high on-board electrical system voltage, comprising:

a MOSFET transistor having a drain source path inserted between a control device connection and a connection of the electronic module, and with:

a source connected to the connection of the electronic module;

a drain connected to the control device connection; and

a gate;

a Zener diode connected between said gate and said source of said MOSFET transistor;

a gate resistor connected between said gate of said MOSFET transistor and a positive pole of the first accumulator; and

a diode connected in parallel with said gate resistor, for conducting current in a direction from said gate to the positive pole of the accumulator;

wherein when a short circuit to the high on board electrical system voltage is conducted to said drain, said MOSFET transistor turns on or remains turned on; and

wherein said MOSFET transistor has a threshold voltage and, in an event of a short circuit to a highest voltage of the on-board electrical system active at the device connection, a source voltage of said transistor is limited to a value $V_s = V_{bat1} - V_{th}$, where V_s is the source voltage, V_{bat1} is the low on-board voltage, and V_{th} is the threshold voltage of said transistor.

Claim 8 (previously presented): The device according to claim 7, wherein said electronic module is disposed in control device for controlling low-power consumers or for processing/transmitting data.

Claim 9 (previously presented): The device according to claim 7, wherein said Zener diode is configured with a breakdown voltage lower than a maximum permitted gate source voltage of said MOSFET transistor.

Claim 10 (canceled).

Claim 11 (currently amended). The device according to claim 7, wherein, on occurrence of a the short circuit to a the highest voltage of the on-board electrical system active at the device connection, said diode connected in parallel to said gate resistor limits the gate voltage of said MOSFET transistor

to a value $V_g = V_{bat1} + V_d$, wherein V_g is the gate voltage, V_{bat1} is the low on-board voltage, and V_d is a conducting state voltage of said diode.

Claim 12 (previously presented): The device according to claim 7, with the protective circuit integrated in an ASIC.

Claim 13 (original): The device according to claim 7, wherein the multi-voltage on-board electrical system is a motor vehicle on-board electrical system.